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EXAMINER

YANG, CLARA I

ART UNIT

PAPER NUMBER

2612

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/665,642

Applicant(s)

HUANG ET AL.

Examiner

Clara Yang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-81 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 72-81 is/are allowed.
- 6) ☒ Claim(s) 1-71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) ✓ | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) ✓ | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

The later-filed application must be an application for a patent for an invention that is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the following prior-filed applications fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application:

- Application No. 10/151,635, filed 20 May 2002, which is (1) a CIP of 09/615,473, filed 13 July 2002; (2) CIP of 09/334,584, filed 16 July 1999 (now US 6,781,518), which is a CIP of 09/121,229, filed 23 July 1998 (now US 6,157,319); and (3) a CIP of 09/905,423, filed 13 July 2001, which claims benefit of 60/264,767, filed on 29 January 2001.
- Application No. 10/288,727, which claims benefit of 60/344,020, filed 20 December 2001, and 60/334,774, filed 20 November 2001.

These applications (10/151,635, 09/615,473, 09/334,584, 09/121,229, 09/905,423, and 10/288,727 all fail to provide adequate support a radio frequency identification (RFID) tag reading system as claimed in claims 1-81 and discussed on pages 11-18, 26-31, and 36 of the current specification as filed. Consequently, in the prosecution of this application, the priority date is established to be the filing date of the application (i.e., 19 September 2003).

Claim Objections

2. Claims 32, 71, and 72 are objected to because of the following informalities:
- Claim 32: Insert "and" at the end of line 10.
 - Claim 71: Claim 71 depends on 78 but appears to depend on claim 68. The examiner considers claim 71 to depend on claim 68.
 - Claim 72: Change "remote control is setup" to "remote control is set up".

Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 42-53, 54-63, and 64-67 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 42, 54, and 64 call for a "readable media having instructions for setting up a universal remote control." The instructions called for in the claims are characterized as functional descriptive material since they impart functionality when employed as a computer component. Functional descriptive material, however, is merely descriptive material and therefore nonstatutory when it is not claimed as embodied in computer-readable media since it is unable to cause functional change in a computer. For example, a "readable media having instructions" includes a piece of paper with the instructions printed thereon. The piece of page with the printed instructions clearly is unable to cause a functional change in a computer.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 64-71 are rejected under 35 U.S.C. 102(e) as being anticipated by Yassin et al. (US 6,505,780).

Referring to claims 64 and 68, Yassin teaches a system and method that personalize vehicle settings using RFID tags. As defined by the 10th edition of *Merriam-Webster's Collegiate Dictionary*, "appliance" is "an instrument or device designed for a particular use;" thus a vehicle is an appliance. As shown in Fig. 1, Yassin's system for personalizing vehicle settings comprises vehicle 1, RFID tag 2, RFID reader 1A, profile database 7 that is externally maintained and accessed by tag profile server (not shown), and Internet 4 (see Col. 5, lines 40-53). It is understood that tag profile server and profile database 7 form a universal remote control since they control a plurality of vehicles. Yassin's method for configuring vehicle 1, as shown in Fig. 4, comprises (a) receiving RFID tag 2's data from RFID reader 1A via tag profile server's receiver at step 15, the data from RFID tag 2 identifying driver profile data 6 and being unique to a driver (see Col. 5, lines 35-39 and Col. 6, lines 42-51); and (b) tag profile server recovering driver profile data 6 using RFID tag 2's data at step 16 and forwarding driver profile data 6, which represents RFID tag 2's data, to vehicle 1 via tag profile server's transmission circuit at step 17 (see Col. 5, lines 53-65 and Col. 6, lines 52-64), thereby causing (1) driver profile data 6, which maps one or more preferences to a driver, to be within vehicle 1 and (2) vehicle 1 to use

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driver profile data 6 to configure itself according to the one or more preferences mapped to the driver at step 18 (see Col. 6, lines 60-64).

Regarding claims 65 and 69, Yassin teaches using RFID tag 2 to unlock vehicle 1's doors (see Col. 5, lines 19-27); thus when a driver's RFID tag 2 fails to unlock vehicle 1's doors, RFID tag 2's data is used to limit access to vehicle 1's functions.

Regarding claims 66 and 70, per Yassin, the data is utilized within vehicle 1 to access content, such as preferred radio stations or programs (see Col. 5, lines 56-65 and Col. 7, lines 5-8).

Regarding claims 67 and 71, Yassin teaches that driver profile data 6 causes vehicle 1 to set a driver's vehicle preferences (see Col. 5, lines 53-56 and Col. 6, lines 60-63); thus driver profile data 6 is part of a command transmission to vehicle 1.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-4, 9, 10, 12-17, 22-27, 31, 42-45, 50, 51, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (US 6,133,847) in view of Qiu (US 2004/0164148).

Referring to claims 1, 14, and 42, Yang teaches a configurable remote control device 100 having a memory 120 that stores programming code for controlling a plurality of appliances 160, such as VCR 200 and TV 220 (see Figs. 1-3B; Col. 3, lines 50-56; Col. 4, lines 39-46; and Col. 8, lines 32-44). As shown in Figs. 1-3B, Yang's remote control device 100 communicates bi-directionally with appliance 160 via data link 150, which is a radio frequency (RF) signal (see Col. 3, lines 19-24 and 66-67; Col. 4, lines 1-5; and Col. 8, lines 10-24). As shown in Fig. 4, Yang's method for setting up remote control device 100, which includes processor 135 and instructions for setting up remote control device 100 upon receiving an appliance 160's interface control signal (see Col. 4, lines 6-14), comprises (a) receiving an interface control signal, which is an identification signal, from a plurality of appliances 160 via remote control device 100's receiver 112 at step 410 (see Fig. 1; Col. 3, lines 25-29 and 50-65; Col. 7, lines 22-26; and Col. 8, lines 10-17 and 54-59); and (b) using the interface control signal received from each appliance 160 to cause select commands to be mapped to select command keys at steps 415 and 420, whereby remote control device 100 is set up such that activation of one or more of the select command keys causes remote control device 100 to issue via its transmitter 114 one or more of the select commands to command operation of an appliance 160 that has been associated with the interface control signal at step 425 (see Figs. 2A, 2B, 3A, and 3B; Col. 4, lines 6-31 and 52-67; Col. 5, lines 1-32 and 48-67; Col. 6, lines 1-58; and Col. 7, lines 26-34). Yang, however, fails to teach that the interface control signal is received from a radio frequency identification (RFID) tag.

In an analogous art, Qiu's method, as shown in Fig. 5, comprises (a) cellular phone 710, personal digital assistant (PDA) 712, or any other computing device receiving data from an RFID tag 704 attached to a television set 716 via the RFID receiver of cellular phone 710, PDA 712, or the other computing device (see Sections [0030]-[0031] and [0036]-[0042]); and (b) using the data received from the RFID tag to obtain information regarding television set 716 associated with RFID tag 704 (see Sections [0021], [0023], [0030]-[0031], and [0039]-[0040]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Yang's remote control device 100 and method as taught by Qiu such that a remote control device 100 receives appliance 160's interface control data from an RFID tag because an RFID tag enables users to promptly access and retrieve pertinent information while making a tagged appliance 160 uniquely identifiable and capable of being tracked almost anywhere (see Qiu, Sections [0002] and [0008]-[0011]).

Regarding claims 2, 15, and 43, Yang, as modified by Qiu, teaches that the RFID tag data comprises data that identifies an appliance 160 and its programming software (i.e., command codes) stored in remote control device 100's memory 120 (i.e., a command code library) (see Yang, Col. 4, lines 39-46 and 52-57; and Col. 8, lines 10-24 and 54-59).

Regarding claims 3, 16, and 44, Yang and Qiu's method, comprises using the data received from an RFID tag to cause select programming code (i.e., select commands) stored in remote control device 100's memory 120 (i.e., a library stored locally on remote control device 100) to be mapped to select command keys (see Yang, Col. 3, lines 50-65; Col. 4, lines 6-31 and 52-67; Col. 5, lines 1-32 and 48-67; and Col. 6, lines 1-58).

Regarding claims 4, 17, and 45, Yang teaches that remote control device 100 will automatically attempt to find the programming code in one of the many download

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mechanisms, starting with appliance 160 itself, and request that the programming code for a particular appliance identifier be downloaded to remote control device 100 when remote control device 100 receives an interface control signal from an appliance 160 that lacks programming code already stored in remote control device 100's memory 120 (see Yang, Col. 8, lines 54-66); thus Yang, as modified by Qiu, teaches using the data received from an RFID tag to cause programming code (i.e., select commands) from a library stored within appliance 160 to be downloaded into remote control device 100 and mapped to select command keys (see Yang, Figs. 2A, 2B, 3A, and 3B; Col. 4, lines 6-31 and 52-67; Col. 5, lines 1-32 and 48-67; Col. 6, lines 1-58; and Col. 7, lines 26-34).

Regarding claims 9, 22, and 50, Yang and Qiu teach that appliance 160's interface control signal identifies appliance 160 (see Yang, Col. 8, lines 54-59), wherein the interface control signal is an electronic product code (EPC) (see Qiu, Sections [0005], [0011], [0028]-[0029], and [0039]).

Regarding claims 10, 23, and 51, Yang and Qiu teach that appliance 160's EPC includes product type identifier (i.e., an appliance type data) and an item serial number (i.e., an appliance designation number data) (see Qiu, Sections [0011] and [0028]-[0029]).

Regarding claims 12, 24, and 53, Yang, as modified by Qiu, teaches that appliance 160's interface control signal identifies appliance 160 and its programming code (i.e., functions supported by appliance 160) (see Yang, Col. 3, lines 50-65; Col. 4, lines 6-14 and 52-57; Col. 7, lines 24-34; and Col. 8, lines 54-59).

Regarding claim 13, Yang and Qiu teach that remote control device 100 provides a separate icon (i.e., mode keys) for each appliance 160 that remote control device 100 is programmed to control such that the activation of each icon causes programming code (i.e., select commands) associated with the appliance selected via the icon to be automatically

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mapped to the select command keys and places remote control device 100 in an operation mode that enables a user to control the selected appliance (see Yang, Col. 8, lines 10-24).

Regarding claim 25, Yang and Qiu's method comprises receiving data from each RFID tag within a radio communication area of remote control device 100 (see Yang, Col. 3, lines 19-29 and Col. 8, lines 10-14; and see Qiu, Sections [0008]-[0009], [0036], and [0039]).

Regarding claim 26, Yang and Qiu's method comprises receiving each appliance 160's interface control signal from each appliance 160's RFID tag to automatically configure remote control device 100 (i.e., map select commands to select command keys) when a user selects an icon representing the appliance to be controlled (i.e., selecting an operational mode) such that the selected appliance is the primary target of commands transmitted from remote control device 100 (see Yang, Col. 8, lines 10-24).

Regarding claim 27, Yang's method, as modified by Qiu, comprises a user selecting an icon representing a particular appliance 160 (i.e., receiving user input) to map programming code to select command keys, wherein each icon places remote control device 100 in an operational mode to operate a particular appliance 160 and is selectable to cause a single, corresponding appliance 160 to be a primary target of commands transmitted from remote control device 100 (see Yang, Col. 8, lines 10-24).

Regarding claim 31, Yang and Qiu's method further comprises remote control device 100 transmitting an RF signal 409 to initiate receiving data via RF signal 411 from the RFID tags (see Qiu, Fig. 3 and Section [0030]).

10. Claims 5, 6, 8, 18, 19, 21, 46, 47, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (US 6,133,847) in view of Qiu (US 2004/0164148) as applied to claims 4, 17, and 45 above, and further in view of Harris et al. (US 2001/0033243).

Regarding claims 5, 6, 8, 18, 19, 21, 46, 47, and 49, though Yang and Qiu teach (1) remote control device 100 automatically attempting to find the programming code in one of the many download mechanisms and request that the programming code for a particular appliance identifier be downloaded to remote control device 100 when remote control device 100 receives an interface control signal from an appliance 160 that lacks programming code already stored in remote control device 100's memory 120 (see Yang, Col. 8, lines 54-66) and (2) the method of using data received from an RFID tag to retrieve information related to appliance 160 from the Internet (see Qiu, Sections [0034] and [0037]-[0040]), Yang and Qiu's method lacks (1) establishing a connection with the library directly from remote control device 100 (as called for in claims 5, 18, and 46), and (2) establishing a connection with the library by means of an intermediate device (as called for in claims 6, 19, and 47), wherein (3) the intermediate device is a personal computer (as called for in claims 8, 21, and 49).

In an analogous art, Harris teaches an online remote control configuration system, as shown in Figs. 7 and 8, comprising electronic system 100 of remote control configuration system 10 (hereinafter referred to as "remote control 10") that connects to Internet 130 via computer system 60 (i.e., a personal computer) or directly (see Sections [0050]-[0059]). As called for in claims 4, 17, and 45, Harris's method for setting up remote control 10, which has a microprocessor 116 that retrieves instruction from memory in order to control remote control 10 (see Sections [0054]-[0055], [0058], and [0061]), comprises (a) receiving a signal emitted from a remote control corresponding to electronic device 12 and uploading the sampled signal to control station 40 via Internet 130 or entering relevant product information of electronic device 12, such as device type and model, to control station 40 via Internet 130 (see Sections [0047]-[0048] and [0077]-[0084]); and (b) using the sampled signal to cause configuration data (i.e.,

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select commands) from a library stored at control station 40 to be downloaded into remote control 10 and mapped to select command keys (see Sections [0063], [0082], and [0085]-[0086]). As called for in claims 5, 18, and 46, Harris's method includes remote control 10 establishing an Internet connection with a library stored at control station 40 directly from remote control 10 (see Fig. 8 and Sections [0059], [0081], and [0085]). As called for in claims 6, 19, and 47, Harris's method also includes remote control 10 establishing an Internet connection with a library stored at control station 40 by means of an intermediate device, wherein the intermediate device is computer system 60 (i.e., a personal computer since remote control 10 is used for controlling home electronic devices), as called for in claims 8, 21, and 49 (see Fig. 7 and Sections [0059], [0081], and [0085]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Yang and Qiu's remote control device 100 and method as taught by Harris because establishing a connection with the library directly from remote control device 100 (as called for in claims 5, 18, and 46) or establishing a connection with the library by means of an intermediate device (as called for in claims 6, 19, and 47), wherein the intermediate device is a personal computer (as called for in claims 8, 21, and 49), allows equipment manufacturers to maintain a centralized library containing the programming codes for each appliance 160, thereby eliminating the need to provide programming codes within each appliance 160, which reduces production costs, and facilitating programming code updates.

11. Claims 6, 7, 19, 20, 47, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (US 6,133,847) in view of Qiu (US 2004/0164148) as applied to claims 4, 17, and 45 above, and further in view of van Ee et al. (US 6,774,813).

Regarding claims 6, 7, 19, 20, 47, and 48, though Yang and Qiu teach (1) remote control device 100 automatically attempting to find the programming code in one of the many download mechanisms and request that the programming code for a particular appliance identifier be downloaded to remote control device 100 when remote control device 100 receives an interface control signal from an appliance 160 that lacks programming code already stored in remote control device 100's memory 120 (see Yang, Col. 8, lines 54-66) and (2) the method of using data received from an RFID tag to retrieve information related to appliance 160 from the Internet (see Qiu, Sections [0034] and [0037]-[0040]), Yang and Qiu's method lacks establishing a connection with the library by means of an intermediate device (as called for in claims 6, 19, and 47), wherein the intermediate device is a cable set top box (as called for in claims 7, 20, and 48).

In an analogous art, van Ee's system, as shown in Fig. 1, comprises (1) programmable control device 106 that controls apparatus 102 and 104 (see Col. 5, lines 30-49) and (2) programming means 110, which is a set top box, that programs control device 106 and includes Internet connection hardware 114 that connects to remote server 118, which has a database (i.e., library) of a plurality of respective sets of multiple control signals to control a plurality of apparatuses (see Col. 5, lines 50-65). Van Ee's method, as shown in Fig. 2, comprises (a) a user selecting control codes from a database (i.e., library) stored at remote server 118 to be downloaded into control device 106 and mapped to select command keys at step 202 (see Col. 5, lines 50-67; Col. 6, lines 1-23; and Col. 7, lines 35-42); (b) remote server 118 identifying all the sets of control codes corresponding to the user-selected apparatus type/brand combination at step 206 and selecting a particular control code corresponding to a particular function of the apparatus to be controlled and transmitted the control codes to programming means 110 via Internet 116 at step 210 (see Col. 7, lines 43-49); (c) programming means 110 interleaving control

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codes with associated identifier codes and transmitting the interleaved control signal to control device 106 to program control device 106 at step 214 (see Col. 7, lines 50-54); (d) the user pressing a button on control device 106's user interface 108 to transmit a control code and its associated identified code for each press at step 216 to determine whether the apparatus to be controlled responded to the transmitted control code at step 218 (see Col. 7, lines 54-58); (e) if the apparatus responded to a transmitted control code, associating the identifier code associated with the control code that caused the apparatus to respond with its respective control code at step 220, and transmitting the respective control code to remote server 118 via Internet 116 at step 22 (see Col. 7, lines 60-66); (f) remote server 118 identifying the set of control codes in which the respective control code belongs to at step 22 and transmitting the identified set to programming means 110 at step 226 (see Col. 7, lines 66-67 and Col. 8, lines 1-2); and (g) programming means 110 transmitting the identified set to control device 106 to associate the control codes of the identified set with control device 106's multiple user inputs (i.e., to map select commands to select command keys). As called for in claims 6, 19, and 47, van Ee's method comprises control device 106 establishing a connection with remote server 118's library by means of an intermediate device, which is a set top box, as called for in claims 7, 20, and 48 (see Col. 5, lines 50-56; Col. 7, lines 36-67; and Col. 8, lines 1-15).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Yang and Qiu's remote control device 100 and method as taught by van Ee because establishing a connection with the library by means of an intermediate device (as called for in claims 6, 19, and 47), wherein the intermediate device is a cable set top box (as called for in claims 7, 20, and 48), allows equipment manufacturers to maintain a centralized library containing the programming codes for each appliance 160,

thereby eliminating the need to provide programming codes within each appliance 160, which reduces production costs, and facilitating programming code updates.

12. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (US 6,133,847) in view of Qiu (US 2004/0164148) as applied to claim 14 above, and further in view of Gharapetian (US 2002/0101357).

Regarding claims 28-30, Yang and Qiu's method comprises using the data received from each of the RFID tags to automatically map select commands to select command keys, as explained in the previous rejections of claim 26, but lacks a remote control device 100 simultaneously commanding a plurality of appliances 160 when remote control device 100 is placed in such a mode.

In an analogous art, Gharapetian's method comprises (a) remote control 100 receiving a plurality of address codes (see Fig. 5 and Sections [0028]-[0031]); and (b) remote control 100 using the received address codes to cause commands to be mapped to select command keys such that activation of one or more of the select command keys causes remote control 100 to control and appliance that has been associated with each received address code (see Fig. 3 and Sections [0018], [0024]-[0026], and [0028]). Regarding claim 28, Gharapetian teaches that remote control 100 has at least one input device 120 that is dedicated to simultaneously turning on or off electronic devices 102, 104, and 106 (see Sections [0017], [0019], and [0020]). In other words, Gharapetian's method comprises using the address codes of electronic devices 102, 104, and 106 to automatically map select commands to select command keys in a mode of remote control 100 such that a plurality of electronic devices 102, 104, and 106 are simultaneously commandable when remote control 100 is placed into the mode by a user pressing input device 120 that is dedicated to simultaneously turning on or off electronic devices 102, 104, and 106. Regarding

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claims 29 and 30, it is understood that the pressing of input device 120 that is dedicated to simultaneously turning on or off electronic devices 102, 104, and 106 places remote control 100 in a home theater mode (as called for in claim 29) or room mode (as called for in claim 30) since pressing input device 120 simultaneously turns on or off a home theater system comprising amplifier 102, TV 104, DVD player 106, control boxes for room lighting, control boxes for controlling a room's curtains, etc. (see Sections [0006]-[0009], [0017], and [0019]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Yang and Qiu's method as taught by Gharapetian's because a method further comprising remote control device 100 simultaneously commanding a plurality of appliances 160 when remote control device 100 is placed in such a mode provides the convenience of turning on or off a plurality of appliances 160 using a single button instead of pressing a plurality of buttons (see Gharapetian, Sections [0007] and [0009]).

13. Claims 1, 11, 32-37, 42, 52, and 54-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allport (US 6,104,334) in view of von Hoffmann (US 2003/0030542).

Referring to claims 1, 11, 32, 42, 52, and 54, Allport teaches remote control 10, as shown in Figs. 2-18, having hardware that is in the same class and similar to that of personal digital assistants (PDAs) such as the Palm Pilot by US Robotics (see Col. 26, lines 61-65). Per Allport, each user of remote control 10 selects his or her screen name, the associated icon or image, preferred visual entertainment (i.e., "pictures" selection) and music selections, and screen layouts (see Col. 23, lines 32-56). Allport discloses that by customizing screen layouts, a user causes select commands to be mapped to select command keys (see Col. 23, lines 61-67 and Col. 24, lines 1-50). As shown in Fig. 3, a user identifies himself or herself by (1) entering a password and selecting his or her icon (see Col. 12, lines 17-26) or (2) using a smart card and/or entering a

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password (see Col. 9, lines 6-12 and Col. 21, lines 21-27 and 53-58). As called for in claims 1 and 42, it is understood that when remote control 10 identifies a user by the user's smart card, Allport's method comprises (a) remote control 10 receiving data from a plurality of smart cards (see Col. 9, lines 6-12 and Col. 21, lines 21-27 and 53-58); and (b) using the user's identity to retrieve the user's selected screen layouts, thereby causing select commands to be mapped to select buttons (i.e., command keys) such that the activation of one or more of the buttons causes remote control 10 to transmit via control infrared (IR) port 640 one or more of the select commands to command operation of an appliance that has been associated with the user's identity received from the user's smart card (see Col. 13, lines 1-10; Col. 15, lines 27-41; Col. 20, lines 62-67; Col. 20, lines 19-67; Col. 23, lines 1-13 and 32-67; Col. 24, lines 1-50; Col. 27, lines 9-14 and 42-44; and Col. 28, lines 23-26). As called for claims 11 and 52, the data from the smart card comprises data that identifies a unique user of remote control 10 (see Col. 9, lines 6-12 and Col. 21, lines 21-27 and 53-58). Allport, however, fails to expressly teach that a user's smart card comprises an RFID tag. Claims 32 and 54 are substantially similar to claims 1, 11, 42, and 52; thus Allport teaches the method called for in claims 32 and 54 but fails to expressly teach that a user's smart card comprises an RFID tag.

In an analogous art, von Hoffmann teaches electronic device 10, which includes a PDA, having electronic lock circuitry 12 (see Fig. 1 and Sections [0001]-[0005], [0008], and [0022]-[0024]). Von Hoffmann's method comprises (a) electronic lock circuitry 12's encoded signal receiver 18 receiving data from remote key 20, which comprises an RFID circuit and it understood to be an RFID tag, the data from remote key 20 being unique to an individual (see Sections [0008]-[0009], [0027], and [0031]); and (b) using the data received from remote key 20 to configure electronic device 10 by enabling the operation of one or more features on electronic

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device 10 as established by one or more access rights (i.e., preferences) that have been mapped to the individual represented by the data received from remote key 20 (see Sections [0027] and [0029]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Allport's method as taught by von Hoffmann because a user's smart card that comprises an RFID tag prevents remote control 10 from being misused when an authorized user and his or her smart card are not within range of remote control 10 (see von Hoffmann, Sections [0028]-[0029]), thereby enhancing security (see Allport, Col. 21, lines 27-30).

Regarding claims 33 and 55, Allport's method, as modified by von Hoffmann, comprises using data received from a user's smart card, which includes an RFID tag, to display the user's selected screen layout (i.e., to display selected command keys according to one or more preferences established for the user represented by the data received from the smart card) (see Allport, Col. 9, lines 6-12; Col. 12, lines 17-26 and 36-41; Col. 20, lines 62-64; Col. 21, lines 3-31; Col. 23, lines 32-67; and Col. 24, lines 1-50).

Regarding claims 34 and 56, Allport and von Hoffmann's method further includes using the data to configure remote control 10 to limit access to command keys, such as those to access certain channels of the TV, by the individual represented from the smart card (see Allport, Col. 21, lines 3-31; and von Hoffmann, Sections [0027] and [0029]).

Regarding claims 35 and 57, Allport's method, as modified by Hoffmann, comprises using the data to configure remote control 10 by making a favorite channels list accessible for the individual represented by the data received from the smart card/RFID tag (see Allport, Col.

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9, lines 41-57; Col. 12, lines 66-67; Col. 13, lines 1-18; Col. 14, lines 7-11; Col. 15, lines 60-67; Col. 16, lines 1-16; Col. 17, lines 1-15; Col. 18, lines 23-54; Col. 20, lines 21-40; and Col. 23, lines 41-47).

Regarding claims 36 and 58, it is understood that Allport and von Hoffmann's method comprises storing a user's preferences on remote control 10 (see Allport, Col. 27, lines 18-32) since Allport teaches that remote control 10's "update system" screen includes an option to allow current setting for all users to be saved onto an alternate storage device, such as a personal computer's hard disk, floppy drive, etc. (see Allport, Col. 23, lines 13-17).

Regarding claims 37 and 59, Allport and von Hoffmann's method comprises remotely storing current settings (i.e., preferences) for all users on a personal computer's hard disk (see Allport, Col. 23, lines 13-17).

14. Claims 38, 39, 41, 60, 61, and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allport (US 6,104,334) in view of von Hoffmann (US 2003/0030542) as applied to claims 32 and 55 above, and further in view of Hayward (US 2004/0025053).

Referring to claims 38 and 60, Allport and von Hoffmann's method lacks having a server that stores the current settings (i.e., preferences) for all users and establishing a connection with the server.

In an analogous art, Hayward teaches a personal data device 10, as shown in Fig. 1, that is a PDA and is hereinafter referred to as "PDA 10" (see Section [0002]). As shown in Fig. 7, PDA 10 stores home data 250, such as audio and video codes 703 that are downloaded and used to operate device 733 (see Sections [0070] and [0086]); thus Hayward's PDA 10 functions as a remote control and is configured by receiving audio and video codes 703. Hayward discloses that the personal data stored on PDA 10 is also remotely stored at database server 50 (see Sections [0060]-[0061] and [0073]). As shown in Fig. 10, Hayward's method for protecting a

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user's personal data, such as home data 250 in Fig. 7, comprises (a) PDA 10 requiring a user to log in by entering a personal identity number (PIN) at step 100 (see Sections [0072] and [0095]); (b) requiring a user to log in a second time if the first attempt was unsuccessful at step 102 (see Section [0095]); (c) uploading all personal data to database server 50 if the second attempt was unsuccessful at step 103 (see Section [0095]); and (d) deleting all data in PDA 10 and resetting variables to default values at step 104 (see Section [0095]). In order to restore the personal data to PDA 10 or to a new PDA 10, the personal data is downloaded from database server 50 to PDA 10 via the method shown in Fig. 11 (see Section [0093]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Allport and von Hoffman as taught by Hayward because the method of (1) remotely storing the current settings (i.e., preferences) for all users in database server 50 and (2) establishing a connection with database server 50 enables a user to download all the current settings from database server 50 in the event remote control 10 is replaced or upgraded (see Hayward, Section [0093]), thereby making remote control 10 convenient to use by eliminating each user having to reprogram his or her preferences each time remote control 10 is replaced or upgraded.

Regarding claims 39, 41, 61, and 63, Allport, von Hoffmann, and Hayward's method comprises remote control 10 establishing connection with a server storing a user's preferences by mean of an intermediate device (as called for in claims 39 and 61) that is a personal computer (as called for in claims 41 and 63) (see Allport, Col. 26, lines 9-16; Col. 28, lines 51-59; and Col. 29, lines 12-30).

15. Claims 40 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allport (US 6,104,334) in view of von Hoffmann (US 2003/0030542) and Hayward (US 2004/0025053) as applied to claims 39 and 61 above, and further in view of van Ee et al. (US 6,774,813).

Regarding claims 40 and 62, though Allport, as modified by von Hoffmann and Hayward, teaches remote control 10 establishing connection to database server 50 by means of an intermediate device, which is a personal computer (see previous rejection of claims 39 and 61), Allport, von Hoffman, and Hayward fail to teach that the intermediate device is a set top box.

In an analogous art, as explained in the previous rejection of claims 6 and 7, van Ee's method comprises control device 106 establishing a connection with remote server 118's library by means of a set top box, as called for in claims 40 and 62 (see Col. 5, lines 50-56; Col. 7, lines 36-67; and Col. 8, lines 1-15).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Allport, von Hoffman, and Hayward's remote control 10 and method as taught by van Ee because establishing a connection with the library by means of a cable set top box (as called for in claims 7, 20, and 48), enables remote control 10 to establish connection with database server 50 without all the communications hardware required for connecting directly to database server 50 via Internet 30, thereby providing an attractive lower-cost alternative for users who can connect to Internet 30 via a cable set top box (see Allport, Col. 29, lines 19-24).

Allowable Subject Matter

16. Claims 72-81 are allowed. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach a method for configuring a

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universal remote control comprises (a) receiving data through RF transmissions from a plurality of RFID tags via the receiver of the universal remote control, each RFID tag being associated with a different individual; (b) determining relative signal strength of the RF transmissions; and (c) using data received from the RFID tag corresponding to the RF transmissions having the greatest relative signal strength to cause select commands to be mapped to select command keys whereby the universal remote control is set up such that activation of one or more of the select command keys causes the universal remote control to issue via its transmission circuit one or more of the select commands to command operation of one or more appliances as established by one or more preferences that have been mapped to the individual represented by the used data.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


- Chiloyan et al. (US 6,008,735) teach a method and system for programming a remote control.
- Johns et al. (US 6,157,319) teach a device, which is to be remotely controlled, automatically reconfiguring a remote control unit as soon as the device is connected to a power source.
- Hayes et al. (US 6,223,348) teach using a smart card to program a universal remote control.
- Hayes et al. (US 2003/0189509) teach configuring a universal remote control by having a device, which is to be remotely controlled, transmit a "squawk" signal or using a bar code reader to read a device's bar code to determine the device's command set.
- Ben-Ze'ev (US 6,791,467) teaches an adaptive remote controller that periodically interrogates appliances and receives an appliance's command codes when a user selects the appliance to be controlled.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clara Yang whose telephone number is (571) 272-3062. The examiner can normally be reached on Tuesdays, 1:00-2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (571) 272-7308. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CY
5 December 2006


Clara Yang